

WEST Search History

DATE: Wednesday, December 10, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT,PGPB,JPAB; PLUR=YES; OP=OR</i>			
L10	18 and L9	4	L10
L9	(project\$ or normal) same mesh\$4	30287	L9
L8	L7 and polygon	11	L8
L7	L6 and (vertex or vertice)	12	L7
L6	L5 and mesh\$ and surface	23	L6
L5	(project\$ or normal) same curve same (trimming or trim or trimmed)	143	L5
L4	12 and L3	60	L4
L3	trim same curve	690	L3
L2	mesh and (trim or trmning or trimmed) and (project\$ or normal) and curve	1249	L2
L1	mesh and trim\$ and (project\$ or normal)	11975	L1

END OF SEARCH HISTORY

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 4 of 4 returned.**☐ 1. Document ID: US 6603473 B1

AB: A method of forming detail data corresponding to a vertex of a polygonal mesh representation of an object surface. The mesh representation has a limit surface, and the vertex has a limit point on the limit surface. The detail data for the vertex relates to the shape of the limit surface near the limit point corresponding to the vertex, and may capture detail about the object surface which is not captured by the mesh representation. The method may involve forming difference or detail data for one or more vertices from the group comprising the vertex in question and one or more neighboring vertices, weighting the resulting difference or detail data with prescribed weights, and deriving the detail data for the vertex in question from the weighted difference or detail data. The difference data for a vertex is the difference between the vertex as mapped onto the object surface and the limit point for the vertex on the limit surface.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWMC	Draw Desc
Image												

☐ 2. Document ID: US 6253164 B1

AB: A method of computer curve and surface modeling includes storing in a computer memory a cloud of points associated with an object and least-square fitting one or more curves or surfaces to the cloud of points. The resulting curves or surfaces representative of the object are easier to describe mathematically and require less computer resources to process.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWMC	Draw Desc
Image												

☐ 3. Document ID: US 5555356 A

AB: A method and system for representing an arbitrary parametric surface having one or more trimming polylines applied thereto. A quadrilateral mesh coextensive with the parametric surface is generated. The quadrilateral mesh has a plurality of edges and vertices coinciding with the line segments and points of the trimming polylines. In order to generate the quadrilateral mesh, a two-dimensional array of U,V values is defined, wherein points in the array are adjusted to include the points of the trimming polylines. After all of the points needing adjustment are adjusted, the points in the array are evaluated, thereby creating geometric coordinate values for each point in the array.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC	Draw Desc
Image												

☐ 4. Document ID: US 5283860 A

AB: A system and method is provided for displaying trimmed surfaces on a computer graphics system. The present invention tessellates a three-dimensional surface into triangles and determines whether a trimming curve intersects any triangles. If an intersection occurs, a polygon trimming mask is formed by performing an exclusive OR operation and rendering the polygon into a mask plane. The XOR operation sets the bits in the mask plane corresponding to the trimming mask to logical 1. The rendering hardware then compares the bits in the mask plane with the bits in the frame buffer and draws those pixels which correspond to the bits set to 1 in the mask plane. Since, the trimming mask is a polygon the rendering hardware can perform shading, or lighting calculations using values for points which are contained on the tessellated triangle. In this manner, consistent lighting of a trimmed surface can be achieved. Additionally, the present invention provides for the formation of multiple trimming masks when multiple trimming curves intersect a tessellated triangle. The multiple trimming masks are sequentially XORed into the mask plane and the corresponding pixels are then drawn.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC	Draw Desc
Image											

Generate Collection

Print

Terms	Documents
18 and L9	4

Display Format:

AB

Change Format

[Previous Page](#)

[Next Page](#)